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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,813	06/09/2001	Francis F. Cohan IV	1043.001US1	5045

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2674

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DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,813

Applicant(s)

COGHAN, FRANCIS F.

Examiner

Kimmhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

DETAILED ACTION

This application has been examined. The claims 1-20 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, 8, 10-11, 13-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Zloot (US patent 5,489,922).

Regarding claim 1, Zloot discloses in figures 1-2, a pointing device comprising a housing (22) substantially shaped to fit a finger of a user; a click sensor disposed within an underside of the housing, the click sensor actuated by the user pressing the underside of the housing through the finger against a first external surface with sufficient force (see pressure sensing element 46, see column 5, lines 3-14), an optical sensor disposed within a surface of the housing, the optical sensor detecting relative movement of the surface of the housing against a second external surface caused by relative movement of the finger of the user (see abstract, means 36 for transmitting a plurality of cursor position control signals to computer processor 10 in response to movement of outer ring 28 in relation to inner ring 26, see column 3, lines 60-66, see column 5, lines 38-57).

Regarding claim 5, Zloot discloses a second housing (24, see figures 1-2) and a second click sensor (46) disposed within an underside of the second housing, the click sensor

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actuated by user pressing the underside of the second housing through the second finger against the first external surface with the sufficient force (see figure 7, column 5, lines 3-14, because the first and second housing are the same features)

Regarding claim 8, Zloof discloses the second finger of the user is a middle finger of the user (see figure 1).

Regarding claims 10 and 17, Zloof discloses a wireless transceiver for wireless communication (12) with a corresponding wireless transceiver of a computing device (14), such that the actuation of the click sensor and the relative movement detected by optical sensor with the computing device through the wireless communication (see figure 1).

Regarding claim 11, Zloof discloses in figure 1-2, a second housing attachable to a wrist (64) of the user and in which the wireless transceiver is disposed; and a cable connecting the second housing (see column 5, lines 63-67).

Regarding claim 13, Zloof discloses the first external surface and the second external surface are the same surface.

Regarding claim 14 as discussed the same claims 1 and 5 above.

Regarding claim 15, Zloof discloses an inherent grip situated at an end of each of the first and second housing (22, 24 because a grip should stick to the housing).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 6-7 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zloof (US patent 5,489,922) as applied claim 1 and 14 in view of Petrich et al. (US patent 6,104,379).

Regarding claims 2-3, 6-7, Zloof discloses in figures 1-2, a pointing device comprising a housing (22) substantially shaped to fit a finger of a user as discussed in claim 1.

However, Zloof does not disclose the grip usage of tip of the finger of the user and the housing is from a flexible, glove-like material. Petrich et al. disclose the grip used of tip of finger and the housing is from a flexible, glove-like material (see figure 1A, gloves 109, 110, see column 6, lines 49-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the grip usage of tip of the finger and the housing is from a flexible, glove-like material as taught by Petrich et al. because this would be worn on the physical fingers of person to protect the fingers as safety and gloves maybe use as hand sensing device such as measures the configuration of the hand (see column 6, lines 43-53).

Regarding claims 18-20, Zloof discloses a pointing device comprising a fit finger, a click sensor disposed within an underside of the housing, the click sensor actuated by the user pressing the underside of the housing through the finger against a first external surface with sufficient force (see pressure sensing element 46, see column 5, lines 3-14), an optical sensor disposed within a surface of the housing, the optical sensor detecting relative movement of the surface of the housing against a second external surface caused

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by relative movement of the finger of the user (see abstract, means 36 for transmitting a plurality of cursor position control signals to computer processor 10 in response to movement of outer ring 28 in relation to inner ring 26, see column 3, lines 60-66, see column 5, lines 38-57) as discussed in claims 1 and 14. However, Zloof does not disclose a glove of a first and second finger. Pertrich et al. disclose the glove-like material (see figure 1A, gloves 109, 110, see column 6, lines 49-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made for using of the gloves as taught by Pertrich et al. and the gloves that fitting into the two fingers having two rings 22 and 24 of Zloof because this would protect the fingers and the two rings to be cleaned.

5. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zloof (US patent 5,489,922) as applied to claims 1 and 14 in view of Russell (US patent 5,481,265).

Zloof discloses a first and second housing shaped to fit a finger of user as discussed above. However, Zloof does not disclose a cable ending in a connector for connection to a computing device, such that the actuation of the click sensor and relative movement detected by the optical sensor are registered with the computing device through the cable. Russell discloses in figure 1A a wireless computer interface (10, can attached the human hand, wrist finger, etc.) transmits infrared user control signal (12) through signal system (14), which is interconnected into a computer (30) via a cable (28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement an cable connected to the computer device as taught by Russell is connected

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to computing device of Zloof because the hardwired versions are less costly to manufacture than wireless versions (see column 6, lines 36-40).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zloof (US patent 5,489,922) in view of Iwasaki (Patent application Publication 2002/0024502).

Zloof discloses a first and second housing shaped to fit a finger of user as discussed above. However, Zloof does not disclose an expansion slot disposed within the second housing and receptive to a corresponding expansion card, data stored on which is accessible to the computing device through the wireless communication. Iwasaki disclose in figure 6, a mouse (40) having a slot (22a) or opening (22a), and the storage medium 21 (expansion card) inserted or taken out of the housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a slot and the storage medium can be inserted or taken out of the housing of the mouse as taught Iwasaki into the second housing of Zloof because this would record new data and interchange the card memory.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D. C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,
Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Kimnhung Nguyen
September 16, 2003



**RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**